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Revisional study on African *Apophyllia*. Part 1. Coleoptera: Chrysomelidae: Galerucinae)

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ABSTRACT. This is the first contribution to the knowledge of African *Apophyllia* based on the study of type materials. Lectotypes are designated for the following taxa: *Apophyllia chloroptera* THOMSON, 1858; *A. consociata* LABOISSIÈRE, 1922; *A. cyaneolimbata* LABOISSIÈRE, 1922; *A. gloriosa* LABOISSIÈRE, 1922; *A. hebes* WEISE, 1904; *A. kivuensis* LABOISSIÈRE, 1940; *A. maynei* LABOISSIÈRE, 1922; *A. sericea* LABOISSIÈRE, 1922; *A. saliens* WEISE, 1904; *Malaxia alluaudi* ALLARD, 1888 and *M. femorata* JACOBY, 1895. The following new synonyms are proposed: *A. alluaudi* (ALLARD, 1888) = *A. kivuensis* LABOISSIÈRE, 1940 = *A. chloroptera* THOMSON, 1858; *A. consociata* LABOISSIÈRE, 1922 = *A. holosericea* LABOISSIÈRE, 1925. Male genitalia of all species studied are figured.

Key words: taxonomy, lectotype designation, synonymy, Coleoptera, Chrysomelidae, Galerucinae, *Apophyllia*, Afrotropical Region

This revision of African species of the genus *Apophyllia* THOMSON, 1858 is the continuation of my revision of Asiatic species of this genus. The first African species, *A. chloroptera*, was described by THOMSON (1858). In the same book, the first description of the genus *Apophyllia* was presented. The genus *Apophyllia* was published also in DEJEAN (1837) and DUPONCHEL & CHEVROLAT in D'ORBIGNY (1842) but these names are treated as nomina nuda (WILCOX 1971). The last taxonomic paper dealing with African *Apophyllia* was published in 1947 by PIC. After this year, *Apophyllia* species were only mentioned in a few faunistic papers.

WILCOX (1971) listed 55 African *Apophyllia* species in his catalogue. Most of them were described by V. LABOISSIÈRE (28 species), some species also by E. ALLARD (9 species), M. PIC (6 species), J. WEISE (4 species), M. JACOBY (3

species), and 1 species by L. FAIRMAIRE, A. GERSTAECKER, J. THOMSON, J. C. W. ILLIGER, and G. E. BRYANT. Fortunately, the type series of all the species are concentrated in only a few public institutions and will be revised subsequently. On the other hand, descriptions of nearly half of the species are based only on females and the coordination of their males could be very troublesome.

In the presented contribution the first results of the revised primary types are commented. The lectotypes are designated for 11 taxa, 3 species are newly synonymized.

The following abbreviations identify the collections housing the material examined:

- BMNH - United Kingdom, London, The Natural History Museum (Sharon SHUTE);
DEI - Germany, Eberswalde Finow, Deutsches Entomologisches Institut (Lothar ZERCHE);
ISNB - Belgium, Brussels, Institut Royal des Sciences Naturelles de Belgique (Didier DRUGMAND, Marcel CLUDTS);
JBCB - Czech Republic, Brno, Jan BEZDĚK collection;
MCSN - Italy, Genova, Museo Civico di Storia Naturale „Giacomo Doria” (Roberto POGGI);
MCZC - USA, Massachusetts, Cambridge, Museum of Comparative Zoology (Phillip D. PERKINS);
MRAC - Belgium, Tervuren, Musee Royal de l’Afrique Centrale (Mark DE MEYER);
NHMB - Switzerland, Basel, Naturhistorisches Museum (Eva SPRECHER-UEBERSAX, Michel BRANCUCCI);
RBCN - Netherlands, Nieuwegein, Ron BEENEN collection;
SMNS - Germany, Stuttgart, Staatliches Museum für Naturkunde (Wolfgang SCHAWALLER);
TMSA - South Africa, Gauteng, Pretoria, Transvaal Museum (Ruth MULLER);
UAGB – Germany, Berlin, Ulf ARNOLD collection;
USNM - USA, Washington D.C., National Museum of Natural History (Alexander KONSTANTINOV);
ZFMK - Germany, Bonn, Zoologische Forschungsinstitut und Museum „Alexander Koenig” (Michael SCHMITT);
ZMHB - Germany, Berlin, Museum für Naturkunde der Humboldt-Universität (Johannes FRISCH).

When recording the label data of the type material examined, a double slash (//) divides data on different labels. The exact label data are cited for the type specimens. The type localities are cited in the original spelling. Other comments and complementations by the author are found in square brackets: [p] – preceding data are printed; [h] – the same, but handwritten; [w] - white label; x/y - number of males/number of females.

***Apophyllia carinata* LABOISSIÈRE, 1922**

Apophyllia carinata LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 241 (key), 253-254 (sep. 153, 165-166) (Type locality: Albertville); LABOISSIÈRE, 1925: 57; LABOISSIÈRE, 1940b: 16; WILCOX, 1971: 143.

TYPE MATERIAL EXAMINED

Holotype (male), labelled: "HOLOTYPUS [red label, p] // Type [w, h, red letters] // MUSÉE DU CONGO Albertville XII-1918 R. Mayné [w, p] // R. DÉT. [p] R [h] 727 [w, p] // *Apophyllia carinata* m m [h] V. Laboissière– Dét. [w, p]" (in MRAC). The holotype is provided with one red label: „HOLOTYPUS, *Apophyllia carinata* Laboissière, 1922, J. Bezděk det. 2003".

Aedeagus as in Fig. 1.

DISTRIBUTION

Congo. I was unable to find any other material besides the holotype and the subsequently published females.

COMMENTS

A. carinata was described from one male (LABOISSIÈRE, 1922). Nearly twenty years later, LABOISSIÈRE (1940b) published and designated additional 3 females as "Allotypes". The three females, now deposited in MRAC, bear the following labels: "ALLOTYPE [p] *carinata* [red label, h] // COLL. MUS. CONGO Lulua: Luashi -XI-1938 F. Freyne [w, p] // R. DÉT. [p] C [h] 4091 [w, p] // V. Laboissière – det. 1940: [h] *Apophyllia carinata* Labois allo-type [w, h]". These specimens are consequently not treated as type material of *A. carinata*.

***Apophyllia chloroptera* THOMSON, 1858**

Apophyllia chloroptera THOMSON, 1858: Arch. Ent. 2: 221-222 (Type locality: Gabon [by the title]); GEMMINGER & HAROLD, 1876: 3569; LABOISSIÈRE, 1922: 242 (key), 246 (sep. 154, 158); WEISE, 1924: 183; LABOISSIÈRE, 1940b: 13 (key); BRYANT, 1958: 63; WILCOX, 1971: 143.

Apophyllia Chloroptera: ALLARD, 1889: LXXII (key) (sep. 7).

Malaxia Alluaudi ALLARD, 1888: Ann. Soc. Ent. Fr. (6)8: 332 (Type locality: Assinie); ALLARD, 1891: 558; **syn. nov.**

Apophyllia Alluaudi: LABOISSIÈRE, 1922: 242 (key) (sep. 154); WEISE, 1924: 183 (as syn. of *A. chloroptera*); LABOISSIÈRE, 1940b: 13 (key).

Apophyllia alluaudi: WILCOX, 1971: 142.

Apophyllia Kivuensis LABOISSIÈRE, 1940a: Expl. Parc Nat. Albert, Miss. de Witte (1933-35), 31: 23-24 (Type locality: Kivu: Rutshuru); LABOISSIÈRE, 1940b: 13 (key), 18; **syn. nov.**

Apophyllia kivuensis: WILCOX, 1971: 145.

TYPE MATERIAL EXAMINED

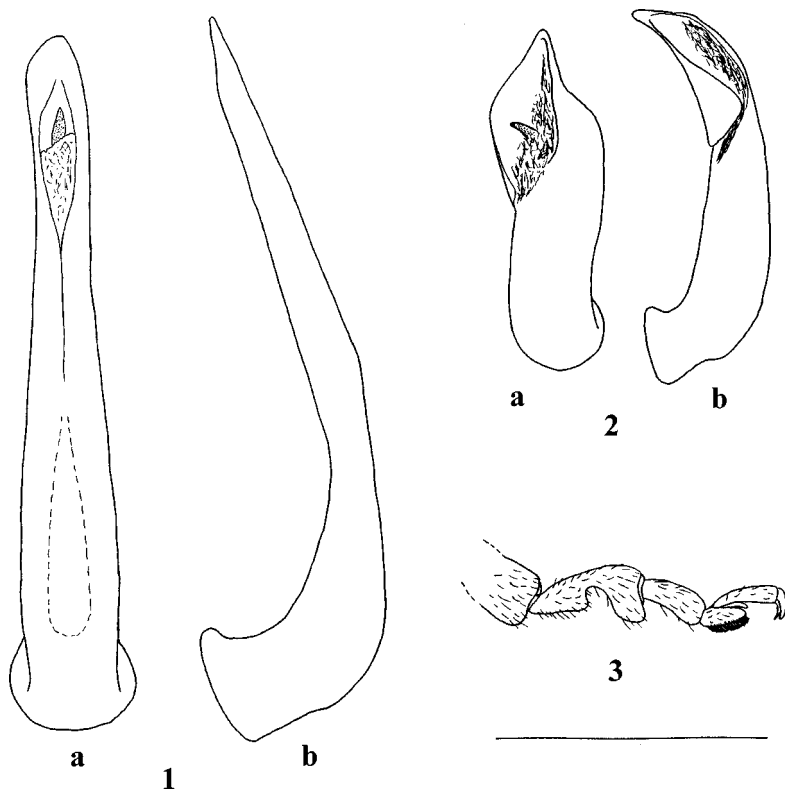
Apophyllia chloroptera THOMSON, 1858

Lectotype (female), designated here, labelled: "Coll. R. I. Sc. N. B. Gabon [blue label on which two following labels are stuck, p] // Gabón [w, h] // Le Moul

vend.: [w, p] // Le Moul't vend. [h] *Apophyllia chloroptera* Thoms. [w, p]" (in ISNB). The lectotype is provided with one red label: „LECTOTYPUS, *Apophyllia chloroptera* Thomson, 1858, des. J. Bezděk 2003".

Malaxia alluaudi ALLARD, 1888

Lectotype (male), designated here, and 7 paralectotypes (females), labelled: "Assinie Afrique oc [blue label, h] // Coll. Alluaud [w, p] // Syntypus [red label, p] // Coll. DEI Eberswalde [w, p]" (in DEI); paralectotype (female), labelled: "Assinie [blue label, h] // Assinie Afrique oc [blue label, h] // Coll. Alluaud [w, p] // *Malaxia alluaudi* All. Assinie [h] TYPE [grey label, red letters, h] // Syntypus [red label, p] // Coll. DEI Eberswalde [w, p]" (in DEI); paralectotype (male), labelled: "Assinie Côte occid. Afrique Ch. Alluaud 1886 [w, p] // Coll. Alluaud [w, p] // *Malaxia Alluaudi* All. [w, h] // Syntypus [red label, p] // Coll. DEI Eberswalde [w, p]" (in DEI); paralectotype (male), labelled: "Assinie Côte occid. Afrique Ch. Alluaud 1886 [w, p] // Jacoby Coll. 1909-28a. [w, p] // *A. chloroptera* Th. = *alluaudi* All. [h] det.K.G.Blair. [w, p]" (in USNM). The specimens are



1-2. Aedeagus (a - dorsal view, b - lateral view): 1 - *Apophyllia carinata*, 2 - *A. chloroptera*; 3 - male mesotarsus of *A. chloroptera*. Scale 1 mm

provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Malaxia Alluaudi* Allard, 1888, des. J. Bezděk 2003”.

Apophyllia kivuensis LABOISSIÈRE, 1940

Lectotype (male), designated here, and 120 paralectotypes (84 males, 36 females), labelled: “LECTOTYPUS [PARA-LECTOTYPUS resp., red label, p] / / MUSÉE DU CONGO Rutshuru [p] IV [h] –1937 J. Ghesquière [w, p] // R. DÉT. 3619 [w, p]” (in MRAC); paralectotype (female), labelled: “PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO Kivu: Rutshuru [p] 9/11-VI-1934 [h] G. F. de Witte PARC NAT. ALBERT [w, p] // Type [red letters, p] ♀ [h] // R. DÉT. [p] B [h] 4592 [w, p] // *Apophyllia kivuensis* m [h] V. Laboissière – dét [w, p]” (in MRAC); paralectotype (male), labelled: “PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO Rutshuru [p] V [h] –1937 J. Ghesquière [w, p] // V. Laboissière – dét., 1939: [h] *Apophyllia kivuensis* m Para-type [w, h]” (in MRAC); 3 paralectotypes (males), labelled: “PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO Rutshuru [p] IV [h] –1937 J. Ghesquière [w, p] // R. DÉT. 3619 [w, p] // *Apophyllia kivuensis* m. ♂ [h] V. Laboissière. det 1939 [w, p]” (in MRAC); paralectotype (male), labelled: “PARA-LECTOTYPUS [red label, p] // Congo belge: Kivu Rutshuru (riv. Fuku) 1250 m. 5-vii-1935 G. F. de Witte: 1621 [w, p] // COLL. MUS. CONGO // R. DÉT. [p] C [h] 4592 [w, p]” (in MRAC); 3 paralectotypes (1 male, 2 females), labelled: “PARA-LECTOTYPUS [red label, p] // Congo belge: Kivu Rutshuru (riv. Kanzarue) 1200 m. 16-vii-1935 G. F. de Witte: 1657 [w, p] // COLL. MUS. CONGO // R. DÉT. [p] C [h] 4592 [w, p]” (in MRAC); paralectotype (female), labelled: “Coll. R. I. Sc. N. B. Congo belge [blue label on which one following label is stuck, p] // Rutshuru (1285) [p] VII [h] 193 [p] 5 [h] G. F. de Witte PARC NAT. ALBERT [w, p] // *Apophyllia Kivuensis* m. 1940 [h] V. Laboissière – Dét. [w, p] // Para-type [red label, p]” (in ISNB); 2 paralectotypes (1 male, 1 female), labelled: “Coll. R. I. Sc. N. B. [blue label on which one following label is stuck, p] // Congo belge: Kivu Rutshuru (Lubirizi) 1285 m. 13-vii-1935 G. F. de Witte: 1644 [w, p] // V. Laboissière – det., 19 [p] 39 [h] : [p] *Apophyllia kivuensis* Laboiss. [w, h] // cf. Expl. P. N. A., G. F. de Witte (1933-1935), fasc. 31, 1940, p. [p] 23-24, fig. 7 [w, h]” (in ISNB); paralectotype (male), labelled: “Coll. R. I. Sc. N. B. Congo belge [blue label on which one following label is stuck, p] // Congo belge: Kivu Rutshuru (riv. Fuku) 1250 m. 5-vii-1935 G. F. de Witte: 1621 [w, p] // V. Laboissière – det., 1939: [h] *Apophyllia kivuensis* m [w, h] // cf. Expl. P. N. A., G. F. de Witte (1933-1935), fasc. 31, 1940, p. [p] 23-24, fig. 7 [w, h]” (in ISNB); paralectotype (female), labelled: “Coll. R. I. Sc. N. B. Congo belge [blue label on which one following label is stuck, p] // Congo belge: Kivu Rutshuru (riv. Kanzarue) 1200 m. 16-vii-1935 G. F. de Witte: 1657 [w, p] // V. Laboissière – det., 19 [p] 39 [h] : [p] *Apophyllia kivuensis* Laboiss. [w, h] // cf. Expl. P. N. A., G. F. de Witte (1933-1935), fasc. 31, 1940, p. [p] 23-24, fig. 7 [w, h]” (in ISNB). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophyllia Kivuensis* Laboissière, 1940, des. J. Bezděk 2003”.

ADDITIONAL MATERIAL EXAMINED

BURUNDI: Kanna, 26-28.i.1926, H. SCHOUTEDEN leg. (1/1 in MRAC); CAMEROON: Kumba distr., Barombi lake, 14.-27.xi.1955, J. BECHYNĚ leg. (3/4 in NHMB – Frey coll.); Nanga Eboko, Dr. LENCZY leg., 1959 (1/0 in USNM); 30 km E Nanga-Eboko, 16.-19.ii.1972, at black light, J. A. GRUWELL leg. (1/1 in USNM); 10 km S of Tongo, 2.-4.iii.1972, filtered black light, J. A. GRUWELL leg. (1/0 in USNM); 20 km E Minta, 20.ii.1972, at black light, J. A. GRUWELL leg. (0/1 in USNM); Libamba, 10 km E of Makak, 16.ix.1973, at black light, J. A. GRUWELL leg. (0/1 in USNM); same data, 20.-29.ix.1973, filtered black light (0/4 in USNM); same data, 29.ix.1973, at black light (1/0 in USNM); same data, 3.-6.x.1973, filtered black light (0/2 in USNM); same data, 16.-26.x.1973, filtered black light (0/1 in USNM); same data, 7.-9.xii.1973, filtered black light (0/1 in USNM); same data, 1.-2.iii.1974, at black light (0/4 in USNM); same data, 21.-25.vi.1974, filtered black light (0/4 in USNM); same data, 18.-19.vi.1974, filtered black light (0/1 in USNM); same data, 26.vii.1974, filtered black light (0/4 in USNM); Yaounde, v.1980 (0/3 in RBCN); Ebolowa, 5.v.1912, S. G. ROTHKIRCH leg. (1/1 in ZMHB); Soppo, 25.ii.1912, S. G. ROTHKIRCH leg. (1/0 in ZMHB); CONGO: Moyen Congo (0/1 in ZSNM); Secteur Nord, Kyanika vill., sur piste Ruwenzori, 1 320 m, 26.ix.1957, P. VANSCHUYTBROECK leg. (1/0 in MRAC); Kivu, Rutshuru, Kanzarue riv., 1 200 m, 15.vii.1935, G. F. DE WITTE leg. (2/1 in MRAC); Kivu, Rutshuru, Lubirizi, 1 285 m, 13.vii.1935, G. F. DE WITTE leg. (0/1 in MRAC); Haut Uele, Moto, 1922, L. BURGEON leg. (0/1 in MRAC); Haut Uele, Watsa, xi.1919, L. BURGEON leg. (1/0 in MRAC); Congo da Lemba, iv.1911, R. MAYNÉ leg. (1/0 in MRAC); GHANA: Ntronang, 2.ii.1975, K. ADLBAUER leg. (1/1 in ZFMK); Accra (on plane), 14.vii.1943 (1/0 in USNM); Takoradi, iv.-xi.1967, BESNARD leg. (2/0 in MRAC); Axim, BESNARD leg. (0/1 in MRAC); GUINEA: Kindia region, Gangan Mt., 3.-18.v. 1951, J. BECHYNĚ leg. (1/2 in NHMB – Frey coll.); Kankan, 1.vii.1951, J. BECHYNĚ leg. (0/1 in NHMB – Frey coll.); Gandon Mt., 24.vi.1984, S. V. MURZIN leg. (1/1 in SMNS); GUINEA EQUATORIAL: Andok, J. Roio leg. (0/1 in USNM); Mongo, 1946-1948, J. PALAU leg. (6/8 in MRAC); NIGERIA: Erin-odo waterfalls, 17.iii.1972, E. W. CLASSEY leg. (1/0 in BMNH); UGANDA: Ruwenzori Range, Kilembe, xii.1934-i.1935, light trap, 4500 ft, F. W. EDWARDS leg. (1/0 in BMNH).

Aedeagus as in Fig. 2.

DISTRIBUTION

Burundi, Cameroon, Congo, Gabon, Ghana, Guinea, Guinea Equatorial, Ivory Coast, Nigeria, Uganda.

COMMENTS

A. chloroptera was designated as the type species of the genus *Apophyllia* by LABOISSIÈRE (1922). I have found only one type specimen (female) deposited in ISNB. Because THOMSON (1858) did not mention the number of available speci-

mens, I designate this female as lectotype. Subsequently described species, *A. alluaudi* and *A. kivuensis*, are morphologically identical (including the structure of aedeagus) and the lectotypes for both are designated here. WEISE (1924) listed *A. alluaudi* as a synonym of *A. chloroptera*. Later, LABOISSIÈRE (1940b) treated *A. alluaudi* as a valid species in his key. Because I am unable to discover any difference between the females of *A. alluaudi* and *A. kivuensis* and the female lectotype of *A. chloroptera*, both subsequent species are considered new synonyms of *A. chloroptera*.

Besides the characteristic structure of the aedeagus, the males can be easily distinguished from their congeners by the peculiar shape of the basimesotarsus (Fig. 3). Within the genus *Apophyllia* and relative genera, a similar (but deeper) incision of basimesotarsus is known only in *Bequaertinia incisitarsis* LABOISSIÈRE, 1922.

***Apophyllia cyaneolimbata* LABOISSIÈRE, 1922**

Apophyllia cyaneolimbata LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 245 (key), 258-259 (sep. 157 (key), 170-171) (Type locality: Région des Lacs; Congo da Lemba); LABOISSIÈRE, 1925: 57; LABOISSIÈRE, 1929: 340; LABOISSIÈRE, 1940b: 14 (key); WILCOX, 1971: 143.

TYPE MATERIAL EXAMINED

Lectotype (male), designated here, labelled: "LECTOTYPUS [red label, p] // MUSÉE DU CONGO Région des Lacs Dr. Sagona [w, p] // *Apophyllia cyaneolimbata* m m [h] V. Laboissière – Dét. [w, p] // R. DÉT [p] F [h] 728 [w, p] // Type [w, h, red letters]" (in MRAC); paralectotype (female), labelled: "PARALECTOTYPUS [red label, p] // Type [w, h, red letters] // MUSÉE DU CONGO Région des Lacs Dr. Sagona [w, p] // R. DÉT [p] F [h] 728 [w, p] // *Apophyllia cyaneolimbata* f m. [h] V. Laboissière – Dét. [w, p]" (in MRAC); paralectotype (female), labelled: "TYPE [p] var. [red label, h] // MUSÉE DU CONGO Congo da Lemba 1913 R. Mayné [w, p] // R. DÉT [p] G [h] 728 [w, p] // *Apophyllia cyaneolimbata* Var. m. [h] V. Laboissière – Dét. [w, p]" (in MRAC); paralectotype (male), labelled: "m [w, p] // Coll. R. I. Sc. N. B. Congo belge [blue label on which two following labels are stuck, p] // Région des Lacs [w, p] // Dr. Sagona [w, p] // *Apophyllia cyaneolimbata* m 1922 m [h] V. Laboissière – Dét. [w, p] // Para-type [red label, p]" (in ISNB). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS] *Apophyllia cyaneolimbata* Laboissière, 1922, des. J. Bezděk 2003".

ADDITIONAL MATERIAL EXAMINED

CAMEROON: Dschang, 1 400 m, x.1912, S. G. ROTHKIRCH leg. (1/0 in ZMHB); Joh.-Albrechtshöhe, 1.ix.-31.x.1897, S. CONRADT leg. (1/2 in ZMHB); CONGO: Mambasa, i.1972, J. TAVERNIERS leg. (1/0 in MRAC); Kisangani, iii.1972, J. TAVERNIERS leg. (1/0 in MRAC); Ruwenzori Mts., Kakalari riv., affl. Bombi, 1 725 m, 10.vi.1954, P. VANSCHUYTBROECK & H. SYNAVE leg. (1/0 in MRAC);

Secteur Nord, Bumali, village pres Mutwanga, 1 300 m, 28.xi.1956, P. VANSCHUYTBROECK leg. (1/0 in MRAC); Secteur Nord, Mukandwe riv., Talya, 1 400 m, 3.viii.1957, P. VANSCHUYTBROECK leg. (1/0 in MRAC); Yangambi, v.1952, J. DECELLE leg. (1/0 in MRAC); Haut Uele, Moto, 1922, L. BURGEON leg. (1/0 in MRAC); GUINEA EQUATORIAL: Fernando Poo Isl., Basile, 400-600 m, viii.1901, L. FEA leg. (1/2 in MCSN); Fernando Poo Isl., Musola, 500-800 m, iii.1902, L. FEA leg. (0/1 in MCSN); Uellebg. Benitob, 15.-31.i.1907, G. TESSMAN leg. (1/0 in ZMHB); UGANDA: Semuliki N. P., 670 m, 0°48'N 30°09'E, 5.-15.ii.1997, U. GÖLLNER leg. (1/0 in ZMHB)

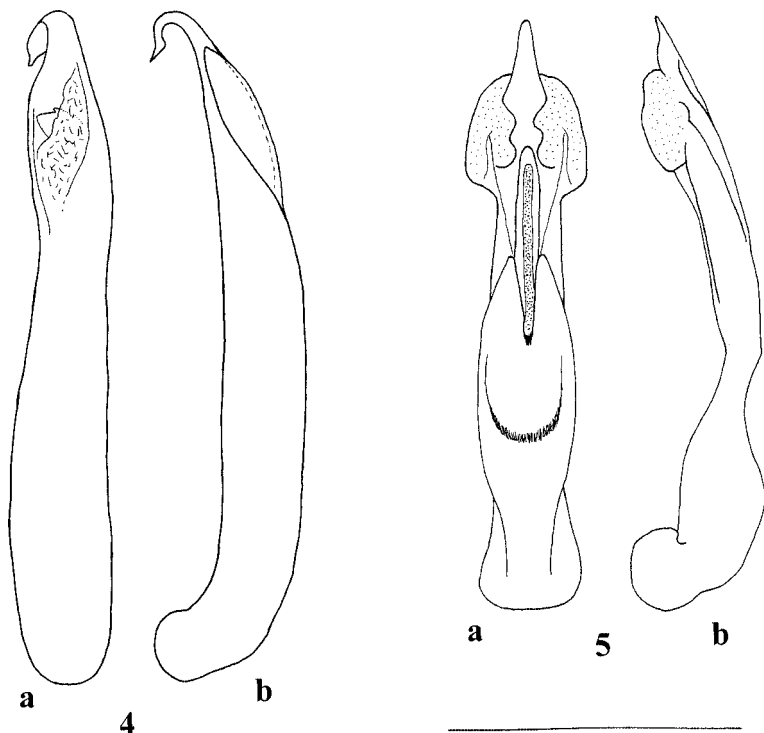
Aedeagus as in Fig. 4.

DISTRIBUTION

Cameroon, Congo, Guinea-Equatorial, Uganda.

COMMENTS

Apophyllia cyaneolimбата can be distinguished from its congeners by the structure of the aedeagus (Fig. 4), by the prolonged and crescent-shaped male basimesotarsus, by the very long male basimetatarsus, 2.3 times as long as the two



4-5. Aedeagus (a - dorsal view, b - lateral view): 4 - *Apophyllia cyaneolimбата*, 5 - *A. femorata*.
Scale 1 mm

following metatarsomeres combined. The general shape of male antennae (antennomeres 3 to 11 distinctly flattened) and length ratio of antennomeres 1 to 11: 21-10-20-21-17-17-15-13-11-10-15, also seem to be important characters.

***Apophyllia femorata* (JACOBY, 1895)**

Malaxia femorata JACOBY, 1895: Trans. Soc. Ent. Lond., 1895: 340-341 (Type locality: South Africa (?)).

Apophyllia femorata: LABOISSIÈRE, 1922: 245 (key) (sep. 157); WEISE, 1924: 183; LABOISSIÈRE, 1940b: 14 (key); WILCOX, 1971: 144.

TYPE MATERIAL EXAMINED

Lectotype (male), designated here, labelled: "2nd Jacoby Coll. [w, p] // sericea Boh. Caffr. [w, h] // Type [p] 18492 [red label, h] // *Malaxia femorata* Jacoby – Type [w, h]" (in MCZC); 2 paralectotypes (males), labelled: "Type H. T. [white round label with red margin, p] // 89 [w, p] // Jacoby Coll. 1909-28a [w, p] // *Malaxia femoralis* Jac. Type [blue label, h]" (in BMNH). The specimens are provided with one red printed label: "LECTOTYPUS [or PARALECTOTYPUS], *Malaxia femorata* Jacoby, 1895, des. J. Bezděk 2003".

ADDITIONAL MATERIAL EXAMINED

RSA: Natal, Malvern, 24.ii.1902 (1/0 in USNM); Natal, Richmond, Mahlaleen riv., xii.1959 E. HAAF leg. (4/1 in NHMB – Frey coll.); Caffrarie, SCHAU leg. (2/0 in DEI); Port St. John, x.1923, R. E. TURNER leg. (1/0 in TMSA); Zululand, Hluhluwe Game Reserve, 28°05'S 32°04'E, 18.xi.1992, ENDRÖDY-YOUNGA leg. (1/0 in TMSA); Bashee Bridge CP, 3.xii.1956, R. M. MARTIN leg. (11/2 in TMSA); Natal, Richmond distr., Umkoma riv. valley, 1.xii.1956 (1/0 in MRAC).

Aedeagus as in Fig. 5.

DISTRIBUTION

This species is known only from RSA.

COMMENTS

JACOBY (1895) described *A. femorata* according to an unspecified number of specimens. I have found altogether 3 syntypes (all males) deposited in MCZC and BMNH. The male from MCZC is designated as lectotype. *A. femorata* is well characterised by the very peculiar shape of aedeagus and by the colour of femora (basal 2/3 black).

***Apophyllia gloriosa* LABOISSIÈRE, 1922**

Apophyllia gloriosa LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 245 (key), 259-260 (sep. 157 (key), 171-172) (Type locality: Région des Lacs); LABOISSIÈRE, 1925: 57; LABOISSIÈRE, 1940b: 15 (key); WILCOX, 1971: 144.

TYPE MATERIAL EXAMINED

Lectotype (male), designated here, labelled: "Coll. R. I. Sc. N. B. South Africa Congo belge [blue label on which two following labels are stuck, h] // Région des Lacs [w, p] // Dr. Sagona [w, p] // Apophyllia gloriosa m. 1922 [h] V. Laboissière – Dét. [w, p] // Para-type [red label, p]" (in ISNB); paralectotype (female), labelled: "PARA-LECTOTYPUS [red label, p] // Type [w, h, red letters] // MUSÉE DU CONGO Région des Lacs Dr. Sagona [w, p] // R. DÉT [p] H [h] 728 [w, p] // Apophyllia gloriosa m. [h] V. Laboissière – Dét. [w, p]" (in MRAC); paralectotype (male), labelled: "PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO Région des Lacs Dr. Sagona [w, p] // Apophyllia gloriosa m. [h] V. Laboissière – Dét. [w, p] // R. DÉT [p] H [h] 728 [w, p]" (in MRAC). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS] *Apophyllia gloriosa* LABOISSIÈRE, 1922, des. J. Bezděk 2003".

ADDITIONAL MATERIAL EXAMINED

CAMEROON: Joko, 1925 (1/0 in ISNB); Dschang, 1 400 m, x.1912, S. G. ROTHKIRCH leg. (3/0 in ZMHB); CONGO: Rutshuru, v.1927, J. GHESQUIÈRE leg. (1/0 in MRAC); Uelé, Bambesa, 20.ix.1933, J. LEROY leg. (1/1 in MRAC); same data, 15.x.1933 (0/1 in MRAC); same data, 30.ix.1933 (0/1 in MRAC); Uelé: Dingila, vi.1933, J. LEROY leg. (1/0 in MRAC); same data, 1.viii.1933, H. J. BRÉDO leg. (1/0 in MRAC); Lomami-Kaniama, iii-iv.1932, R. MASSART leg. (1/0 in MRAC); Kilo, Mongbwalu, 1938, Mme SCHEITZ leg. (1/0 in MRAC); Kivu, Loashi, viii.1937, J. GHESQUIÈRE leg. (1/0 in MRAC); Haut-Uelé, Moto, 1923, L. BURGEON leg. (1/0 in MRAC); Stanleyville, Yangambi, v.1954, J. DECELLE leg. (3/3 in MRAC); same data, v. 1952 (3/0 in MRAC); Mambasa, i.1972, J. TAVERNIERS leg. (1/0 in MRAC); Kisangani, iii.1972, J. TAVERNIERS leg. (2/0 in MRAC); Hoyo Mt., gr. Kwama-Kwama, 1 230 m, 4.viii.1955, P. VANSCHUYTBROECK leg. (1/0 in MRAC); NIGERIA: S. Nigeria, 1913, A. D. PEACOCK leg. (3/0 in BMNH); S. Nigeria, Ilesha, 1911, L. E. H. HUMFREY leg. (1/0 in BMNH); Western State Ile-Ife, vi.1972, J. T. MEDLER leg. (1/0 in USNM); UGANDA: Masindi distr., Budongo Forest near Sonso, 1°45'N 31°35'W, 1.-10.vii.1995, T. WAGNER leg. (1/0 in ZFMK).

Aedeagus as in Fig. 6.

DISTRIBUTION

Congo, Cameroon, Nigeria, Uganda.

COMMENTS

According to the original description, *A. gloriosa* was described based on 3 syntypes (2 males and 1 female) deposited in ISNB (1 male) and MRAC (1 male and 1 female). The male from ISNB is designated here as the lectotype.

***Apophyllia hebes* WEISE, 1904**

Apophyllia hebes WEISE, 1904: Arch. Naturg., 70: 48 (Type locality: Ikuta); WEISE, 1907, 73: 216; LABOISSIÈRE, 1922: 240 (key), 253 (sep. 152, 165); WEISE, 1924: 183; WILCOX, 1971: 144.

TYPE MATERIAL EXAMINED

Lectotype (male), designated here, labelled: "Africa or. Ikutha [w, p]" (in ZMHB); paralectotype (female), labelled: "Africa or. Ikutha [w, p] // *Apophyllia hebes* m. [w, h]" (in ZMHB). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophyllia hebes* Weise, 1904, des. J. Bezděk 2003”.

ADDITIONAL MATERIAL EXAMINED

KENYA: Rift Valley Mathews Range, ca. 35 km N Wamba, 1300-1400 m, 1°10'707''N 37°18'962''E, 7.-12.xii.2002, C. HAUSER, D. BARTSCH & A. ZAHM leg. (3/13 in SMNS); Eastern Meru N.P., Bwatherongi Campsite near Park-Headquarter, 620 m, 0°09'870''N 38°12'527''E, 4.-6.xii.2002, C. HAUSER, D. BARTSCH & A. ZAHM leg. (6/10 in SMNS); Voi, 13.-17.xii.1997, M. SNÍŽEK leg. (1/0 in RBCN); same data, 23.xi.1997 (1/1 in RBCN); same data, xi. 1997 (0/4 in JBCB); Nairobi, Oloitokitok, 30.xii.1945 (1/1 in MCSN).

Aedeagus as in Fig. 7.

DISTRIBUTION

Kenya.

COMMENTS.

A. hebes was described from two specimens (male and female) collected in Ikuta (Kenya). The male is designated as lectotype. *A. hebes* and its closely related species *A. saliens* WEISE, 1904, are characterised by unusually exaggerated male hind femora resembling the femora of the subfamily Alticinae and by a furca-like male metasternal protuberance. This metasternal process is more slender in *A. hebes* (Fig. 8) and very robust in *A. saliens* (Fig. 9).

***Apophyllia holosericea* LABOISSIÈRE, 1925**

Apophyllia holosericea LABOISSIÈRE, 1925: Encycl. Ent. (B) 1: 57 (replacement name for *A. sericea* LABOISSIÈRE, 1922, not FABRICIUS, 1798); BRYANT, 1958: 63; WILCOX, 1971: 144.

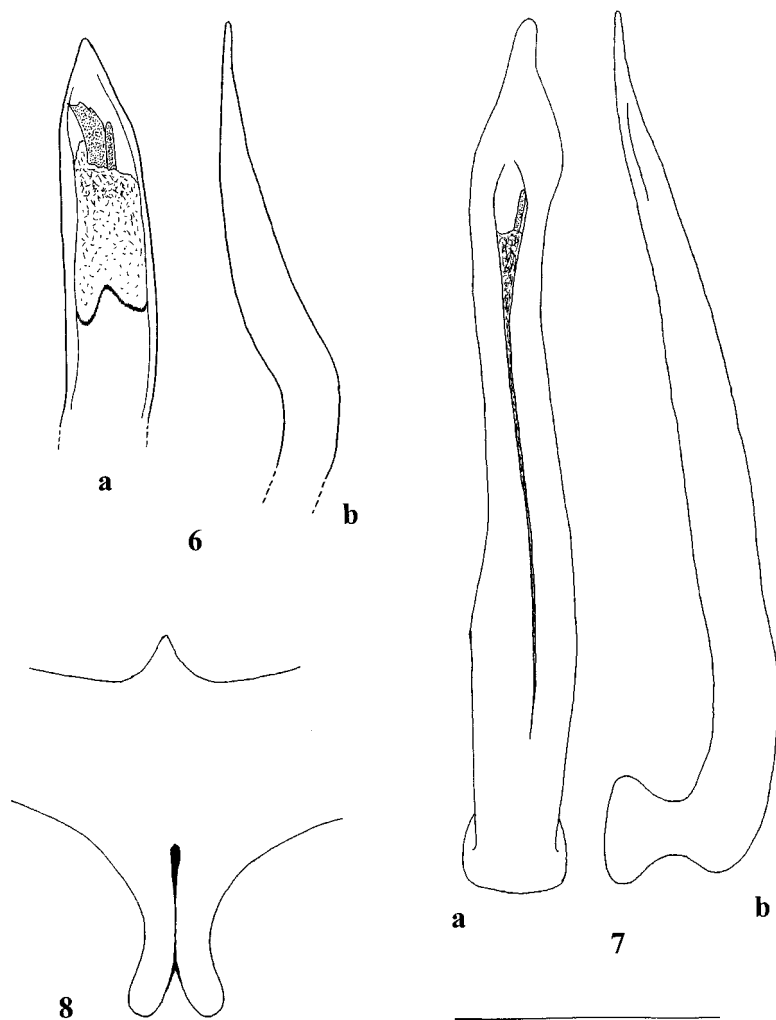
Apophyllia sericea LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 240 (key), 254-255 (sep. 152, 166-167) (Type locality: Rivière Tsavo, rivière Kerio, Campi Kiboko, Jonct. Camp., E. Elgon).

Apophyllia consociata LABOISSIÈRE, 1922: Rev. Zool. Afr., 242 (key) (sep. 154) (Type locality: Zanguebar); LABOISSIÈRE, 1925: 57; LABOISSIÈRE, 1940b: 11 (key); WILCOX, 1971: 143; **syn. nov.**

TYPE MATERIAL EXAMINED

Apophyllia sericea LABOISSIÈRE, 1922

Lectotype (male), designated here, labelled: "LECTOTYPUS [red label, p] // MUSÉE DU CONGO [p] B. E. A. Campi Kiboko [h] Dr. Bayer [w, p] // R. DÉT. [p] U [h] 4091 [w, p]" (in MRAC); paralectotype (female), labelled: "PARA-LECTOTYPUS [red label, p] // Type [red letters, w, p] // MUSÉE DU CONGO B. E. A.: Tsavo R. 4/21-V-1913 Dr. Bayer [w, p] // R. DÉT. [p] U [h] 4091 [w, p] / / *Apophyllia sericea* m. [h] V. Laboissière – Det. [w, p] // V. Laboissière vid., 1940: [p] *Apophyllia holosericea* Labois (*sericea* Labois non *sericea* Fab.) [w, h]" (in MRAC); paralectotype (female), labelled: "PARA-LECTOTYPUS [red label,



6-7. Aedeagus (a - dorsal view, b - lateral view): 6 – *Apophyllia gloriosa*, 7 – *A. hebes*; 8. male metasternal protuberance of *A. hebes*. Scale 1 mm

p] // MUSÉE DU CONGO B. E. A.: Jonct. Camp – E. Elgon IV-V-1914 Dr. Bayer [w, p] // R. DÉT. [p] U [h] 4091 [w, p]“ (in MRAC); paralectotype (female), labelled: “PARA-LECTOTYPUS [red label, p] // Type [red letters, w, p] // MUSÉE DU CONGO B. E. A.: Kerio Riv. VI-1914 Dr. Bayer [w, p] // R. DÉT. [p] U [h] 4091 [w, p] // *Apophyllia sericea* m. [h] V. Laboissière – Det. [w, p]“ (in MRAC); 3 paralectotypes (2 males, 1 female), labelled: “PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO B. E. A.: Kerio Riv. VI-1914 Dr. Bayer [w, p] // R. DÉT. [p] U [h] 4091 [w, p]“ (in MRAC); paratype (female), labelled: “Coll. R. I. Sc. N. B. [blue label on which three following labels are stuck, p] // B.E.A.: Kerio Riv. [w, p] // VI. 1914 [w, p] // Dr. Bayer [w, p] // *Apophyllia sericea* m 1922 [h] V. Laboissière – Dét. [w, p] // Para-type [red label, p]“ (in ISNB). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophyllia sericea* Laboissière, 1922, des. J. Bezděk 2003”.

Apophyllia consociata LABOISSIÈRE, 1922

Lectotype (male), designated here, labelled: “Coll. R. I. Sc. N. B. [p] Ex Coll Laboissière [blue label on which one following label is stuck, h] // Zanguebar [grey label, h] // *Apophyllia consociata* m. 1922 [h] V. Laboissière – Dét. [w, p] // Holotype [red label, p]“ (in ISNB). The lectotype are provided with one red label: „LECTOTYPUS, *Apophyllia consociata* Laboissière, 1922, des. J. Bezděk 2003”.

ADDITIONAL MATERIAL EXAMINED

ETHIOPIA: Kaffa prov., Mui game res., 700 m, 10.iv.1972, R. O. S. CLARKE leg. (1/0 in MRAC); KENYA: Kibwezi, Hunters lodge, 2.xii.1997, M.SNÍŽEK leg. (0/3 in UAGB, 0/1 in RBCN); Tsavo, East Buchuma, 28.xi.1997, M. SNÍŽEK leg. (1/0 in RBCN); Kasigau Mts., Rukanga, 26.xi.1997, M.SNÍŽEK leg. (1/0 in RBCN); Voi, 23.xi.1997, M.SNÍŽEK leg. (5/1 in RBCN, 3/0 in JBCB); same data, 13.-17.xii.1997 (1/0 in RBCN); Garissa env., 30.xi.1999, M.SNÍŽEK leg. (1/0 in JBCB); Taita, Mwatate env., 24.xi.1999, M.SNÍŽEK leg. (1/0 in JBCB); 35 km N Wamba, Rift Valley, Mathews Range, 1300-1400 m, 1°10'707''N, 37°18'962''E, 7.-12.xii.2002, C. HAUSER, D. BARTSCH & A. ZAHM leg. (2/8 in SMNS); Eastern Nyambeni Hills, Ngaja Forest, 1070 m, at light, 0°19'113''N, 38°02'609''E, 2.-4.xii.2002, C. HÄUSER, D. BARTSCH & A. ZAHM leg. (4/23 in SMNS); TANZANIA: Handeni, Makinda env., 14.iii.2002, M.SNÍŽEK leg. (3/0 in JBCB); Pande env., 10.iii.2002, M.SNÍŽEK leg. (8/9 in JBCB); Makata plain (Morogoro), 9.iii. 2002, M. SNÍŽEK leg. (5/5 in JBCB); PATRIA?: B.E.A. [= British East Africa], Zuwani, 28-VI-1913, Dr. BAYER leg. (1/0 in MRAC); D.O.A. [= Deutsche Ost Afrika], Kwakiyambe, v.1916, METHNER leg. (1/1 in ZMHB).

Aedeagus as in Fig. 10.

DISTRIBUTION

Ethiopia, Kenya, Tanzania.

COMMENTS

Eight specimens from the type series of *A. sericea* were found (7 syntypes in MRAC, 1 syntype in ISNB). One of the male syntypes from MRAC is designated here as the lectotype. *A. sericea* LABOISSIÈRE, 1922 proved to be preoccupied by *A. sericea* (FABRICIUS, 1798) and was replaced by LABOISSIÈRE (1925) himself as *A. holosericea*.

The description of *A. consociata* is very brief in the identification key and was possibly omitted within the other descriptions (LABOISSIÈRE, 1922). I have found one male in ISNB whose label data fits the above short description. The red label “Holotype” was very probably added by the subsequent curator. The second specimen deposited in MRAC is not a type specimen and it bears LABOISSIÈRE’s identification label of the year 1940. Because LABOISSIÈRE did not state the number of available specimens, I decided to designate here the male from ISNB as the lectotype.

The examination of aedeagi of the primary types of both species showed no difference in the structure of male genitalia. LABOISSIÈRE (1922) distinguished *A. consociata* and *A. sericea* by the structure of elytral hairs which are recumbent and silk-like in *A. sericea*. The lectotype of *A. consociata* is nothing but a worn specimen of the same species. Both *A. consociata* and *A. sericea* were described in the same paper. According to ICZN (24.2.2.), the nomenclatorial priority is fixed by the first revising author. Due to the very short description and of the only known type specimen of *A. consociata*, I decided to apply *A. sericea* as the senior synonym. *A. consociata* is considered a new synonym of *A. sericea*. Due to the subsequent renaming the valid name of this species is *A. holosericea*.

***Apophylia maynei* LABOISSIÈRE, 1922**

Apophylia Maynéi LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 244 (key), 255-256 (sep. 156 (key), 167-168) (Type locality: Albertville).

Apophylia Maynei: LABOISSIÈRE, 1925: 58.

Apophylia maynei: WILCOX, 1971: 146.

TYPE MATERIAL EXAMINED

Lectotype (male), designated here, and 2 paralectotypes (males), labelled: “LECTOTYPUS [or PARALECTOTYPUS, resp., red label, p] // Type [w, h, red letters] // MUSÉE DU CONGO Albertville XII-1918 R. Mayné [w, p] // R. DÉT. [p] D [h] 728 [w, p] // Apophylia Maynei m [h] V. Laboissière – Dét. [w, p]” (in MRAC); 2 paralectotypes (males), labelled: “PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO Albertville XII-1918 R. Mayné [w, p] // R. DÉT. [p] D [h] 728 [w, p] // Apophylia Maynei m [h] V. Laboissière – Dét. [w, p]” (in MRAC); paralectotype (male), labelled: “m [w, p] // Coll. R. I. Sc. N. B. Congo belge [blue label on which three following labels are stuck, p] // Albertville [w, p] // XII-1918 [w, p] // R. Mayné [w, p] // Apophylia Maynei m 1922 [h] V. Laboissière – Dét. [w, p] // Para-type [red label, p]” (in ISNB). The specimens are

provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophyllia Maynéi* Laboissière, 1922, des. J. Bezděk 2003”.

ADDITIONAL MATERIAL EXAMINED

CONGO: Lualaba, Kolwezi, v.1955, V. ALLARD leg. (1/1 in MRAC).
Aedeagus as in Fig. 11.

DISTRIBUTION

Congo.

COMMENTS

A. maynei was described from 6 specimens deposited in MRAC (5 males) and ISNB (1 male). I designated one of the males from MRAC as the lectotype.

Apophyllia saliens WEISE, 1904

Apophyllia saliens WEISE, 1904: Arch. Naturg., 70: 49 (Type locality: Abessynien); WEISE, 1907: 216; LABOISSIÈRE, 1922: 239 (key) (sep. 151); WEISE, 1924: 183; WILCOX, 1971: 147.

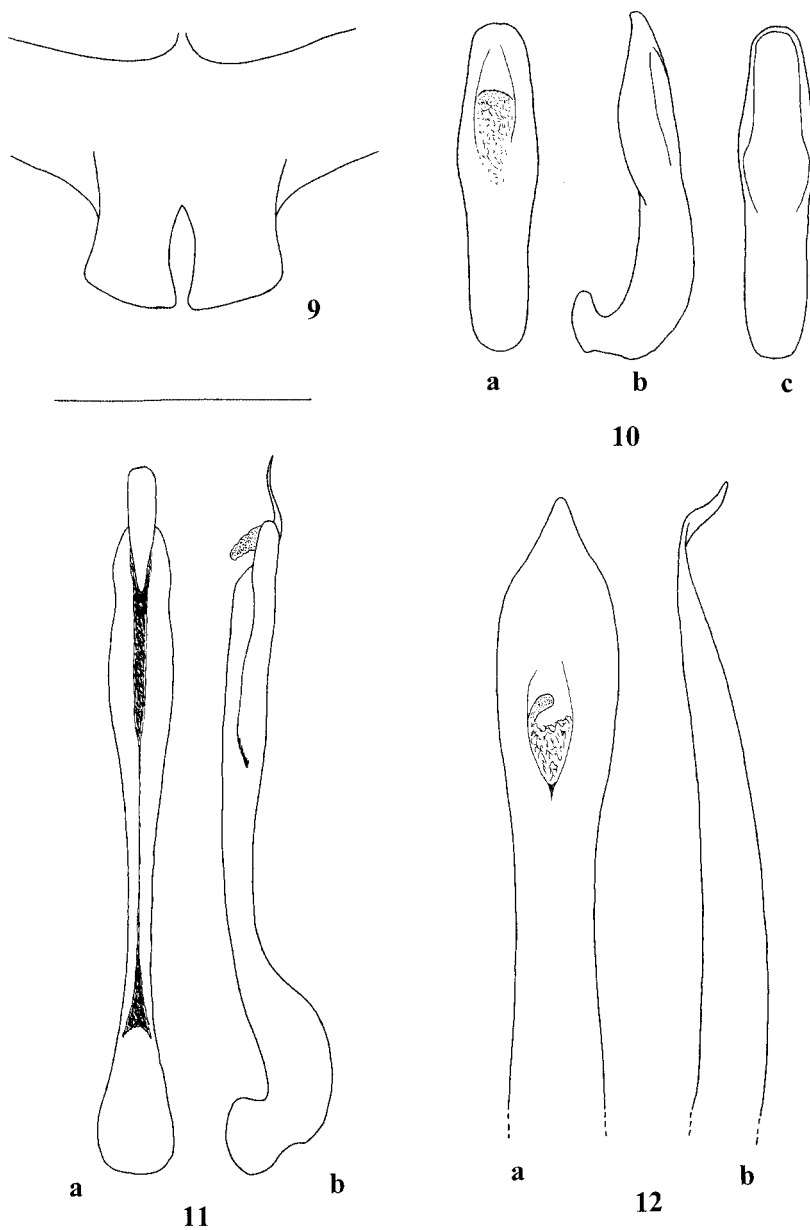
TYPE MATERIAL EXAMINED

Lectotype (male), designated here, labelled: “Sobat Neuman [blue label, h] // m [w, h] // *Apophyllia saliens* m. [w, h]” (in ZMHB); paralectotype (female), labelled: “N. O.–Afrika O. Sudan, Sobat O. Neumann S. V. [blue label, p] // Sobat [w, h] // *Malaxia saliens* m. [w, h]” (in ZMHB); 3 paralectotypes (females), labelled: “N. O.–Afrika O. Sudan, Sobat O. Neumann S. V. [blue label, p]” (in ZMHB); paralectotype (female), labelled: “N. O.–Afrika O. Sudan, Tādo O. Neumann S. V. [blue label, p]” (in ZMHB); paralectotype (female), labelled: “N. O.–Afrika O. Sudan, Tādo O. Neumann S. V. [blue label, p] // 2462 Tādo [w, h]” (in ZMHB); paralectotype (male), labelled: “m [w, h] // O. Sudan Adjuba I. U. O. Neumann [blue label, p]” (in ZMHB); paralectotype (female), labelled: “O. Sudan Adjuba I. U. O. Neumann [blue label, p] // 2932 Adj. I. U. [w, h]” (in ZMHB); paralectotype (female), labelled: “O. Sudan Adjuba I. U. O. Neumann [blue label, p]” (in ZMHB). The specimens are provided with one red label: „LECTOTYPUS, *Apophyllia saliens* Weise, 1904, des. J. Bezděk 2003”.

ADDITIONAL MATERIAL EXAMINED

SUDAN: Fung Prov., 10.ix.1930, H. B. JOHNSTON leg. (2/0 in BMNH); Wau (3/1 in ZMHB); Kodak, 21.vii.1921 (1/0 in ISNB); Fachoda, Mission Marchand, vii.1898, Dr. SMILY (0/1 in USNB); ETHIOPIA: Ilubabor prov., Gambela, 15.-17.xi.1972, R. O. S. CLARKE leg. (1/0 in MRAC).

Aedeagus as in Fig. 12.



9. Male metasternal protuberance of *Apophyllia saliens*; 10-12. Aedeagus (a - dorsal view, b - lateral view, c - ventral view): 10 - *A. holosericea*, 11 - *A. maynei*, 12 - *A. saliens*. Scale 1 mm

DISTRIBUTION

Sudan, Ethiopia.

COMMENTS

The original description of *A. saliens* is very short and brief (WEISE, 1904) and it follows the description of *A. hebes*. Abessynien [= Ethiopia] is indicated as the type locality of *A. saliens*. Three years later, WEISE (1907) somewhat improved the description and cited the locality "Sobat (Neumann)". Sobat is a river running from Ethiopia to Sudan.

I had the opportunity to study the complete syntype series deposited in ZMHB collected by the expedition of Oskar NEUMANN in 1902. According to the original labels, all the material is located in East Sudan. 5 specimens bear the label "Sobat", 3 specimens "Adjuba" and 2 specimens "Tädo". One female from "Sobat" also bears WEISE's handwritten label "Apophyllia saliens m.". In my opinion, although WEISE (1904) cited "Abyssinien", all 10 specimens collected by NEUMANN in Sudan refer to the original description. I decided to designate one male from "Sobat" as the lectotype and the rest (9 specimens) as paralectotypes of *A. saliens*.

One female from ISNB (Sudan: Fachoda) bears the label "Syntype". Evidently, this label was added by a subsequent curator. This female is consequently not treated as type material.

A. saliens can be easily distinguished by unusually extended male hind femora and by robust and a wide furca-like male metasternal protuberance (Fig. 9).

ACKNOWLEDGEMENT

I would like to express my thanks to all curators and collectors listed above for the possibility of examining the extensive material. The above investigations were realized within the frame of the AF MZLU MSM 432100001.

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